TRINITRON® COLOR TV RECEIVER

# KV-1711D/1712D/1910D



TRINITRONILLIS

# **Operating instructions**

To get the greatest enjoyment from your Sony Color TV, read this manual carefully before operating the set. Please retain this manual for future reference.

# WARNING

Dangerously high voltages are present inside the set. DO NOT OPEN THE CABINET. Refer servicing to qualified personnel only.

To prevent fire or shock hazard, do not expose the set to rain or moisture.

# **CAUTION**

- Operate only on 120V ac.
- Should any liquid or solid object fall into the cabinet, unplug the set and have it checked by qualified personnel before operating it any further.
- Allow adequate air circulation to prevent internal heat build-up. Do not place the set on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not attempt to make any of the adjustments at the small holes in the rear of the set. These are special adjustments to be performed only by qualified personnel.
- Unplug the set from the wall outlet when it will not be used for an extended period of time.
- To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- This set is equipped with a polarized AC power cord plug (one blade of the plug is wider than the other), which will fit into the power outlet only one way. Should you be unable to insert the plug fully into the outlet, try reversing the plug. Should the plug still fail to fit, contact your dealer for assistance. Do not defeat the safety purpose of the polarized plug.

#### **NOTES**

- Do not install the set in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Save the original shipping carton and packing material; they will come in handy if you ever have to ship your set for repairs or to a new location. For maximum protection, repack your set as it was originally packed at the factory.
- To keep the set looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild soap solution. Never use strong solvents such as thinner or benzine, or abrasive cleansers, since these will damage the cabinet.

#### **FEATURES**

• Advanced new automatic circuits are built into your Sony Color TV to eliminate the necessity for frequent readjustment of the tuning and color controls.

A touch of the AUTO/AFT Switch instantly activates these circuits to tune your set for peak performance and locks the color processing system to factory preset values that assure realistic reproduction of every shade and tint.

• Your Sony Color TV features the unique ECONOQUICK system, which provides a picture within seconds after the set is switched on. Unlike conventional instant-picture systems, there is absolutely no power consumption when the set is not in use. This system represents the latest development of the Trinitron picture tube.

#### ANTENNA CONNECTION

#### **Indoor Antennas**

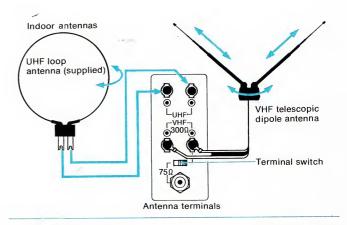
- For VHF reception: Use the VHF telescopic dipole antenna; adjust the length, direction and angle of both elements symmetrically for the best possible picture. Check that the Terminal Switch at the rear is set to the  $300\Omega$  position.
- For UHF reception: Connect the AN-15 UHF Loop Antenna (supplied) to the UHF antenna terminals at the rear of the set. Loosen the nuts on the UHF terminals and insert the lugs of the loop antenna into the terminals. Tighten the nuts. Swing the loop back and forth and/or sideways until the best available picture is obtained.

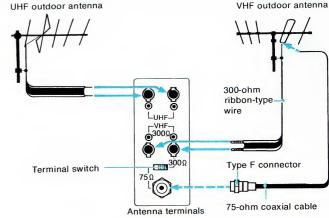
#### **Outdoor Antennas**

In difficult reception areas (inside steel-frame buildings, in mountainous areas, or at great distances from the transmitter), the use of an external antenna will give better reception. When using an outdoor antenna, disconnect the indoor antenna from the antenna terminals.

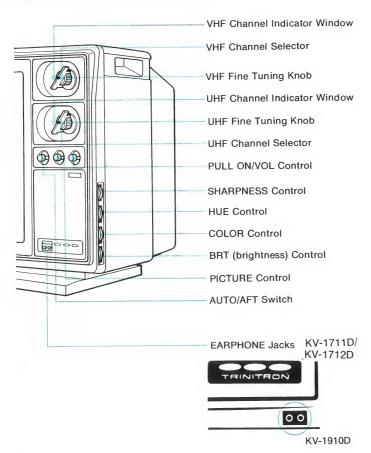
- For VHF reception: When using 300-ohm ribbon-type lead-in wire, set the Terminal Switch to the  $300\,\Omega$  position. To connect the wire to the VHF antenna terminals, strip the plastic insulation from the end of the lead-in wire, loosen the nuts on the terminals, wrap the bare copper leads around the terminals, then tighten the nuts. When using 75-ohm coaxial cable, set the Terminal Switch to  $75\,\Omega$ . The connection can be made with an optional type F antenna connector.
- For UHF reception: The Terminal Switch has no effect upon this connection. The connection to the UHF antenna terminals can be made in the same manner as explained for the VHF antenna connection.

For UHF antennas using 75-ohm coaxial cable, the External Antenna Connector EAC-13W (optional) permits convenient connection. This plugs directly into the UHF terminals and accepts an optional type F connector.





#### **LOCATION OF CONTROLS**



#### **OPERATION**

Push the PULL ON/VOL Control to the "off" position. Set the BRT (brightness) Control to its center detent position. Set the SHARPNESS Control to its center detent position. Plug the TV set into a 120V ac outlet.

#### To switch on the TV

Pull the PULL ON/VOL Control. The picture will appear in a few seconds. To switch off, push in this knob.

#### To increase the sound

Turn the PULL ON/VOL Control clockwise  $\curvearrowright$  . To decrease, turn it counterclockwise  $\curvearrowright$  .

#### To operate in the automatic mode

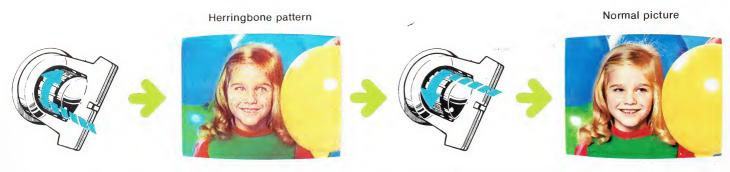
Push the AUTO/AFT Switch. The switch illuminator lights indicating the automatic mode.

- In the automatic mode, the AFT (Automatic Fine Tuning) locks in the correct signal and secures sharper pictures on all channels.
- In the automatic mode, the color circuits also lock to preset values of hue and color to provide correct reproduction.

#### To select the desired VHF channel (2–13)

Turn the VHF Channel Selector until the desired channel number appears in the indicator window. After initial adjustment, there will normally be no need for fine tuning readjustment on the VHF channels. However, if the picture is not clear, adjust fine tuning as follows:

Push in the VHF Fine Tuning Knob and turn it clockwise until a herringbone pattern appears in the colored parts of the picture. Then turn the knob slowly counterclockwise and release it at the point where the herringbone pattern just disappears and the picture is clear. This is the correct tuning point.



- When the VHF fine tuning adjustment is made for the first time, it may be necessary to turn the Fine Tuning Knob several rotations. Subsequent corrections will require a smaller degree of adjustment.
- In the automatic mode, when the VHF Fine Tuning Knob is pushed in, the AFT is disengaged in order to fine-tune the channel manually. When you release the knob, the AFT will be reactivated to maintain correct tuning.

#### To select the desired UHF channel (14-83)

First turn the VHF Channel Selector until the letter U appears in the indicator window. Then turn the UHF Channel Selector until the desired channel number appears in the indicator window. In case of extreme interference, or of an extremely weak station, adjust the fine tuning as follows:

- Release the AUTO/AFT Switch to disengage the AFT.
- ② Slowly turn the UHF Fine Tuning Knob clockwise until a herringbone pattern appears in the colored parts of the picture. Then slowly turn the knob counterclockwise until the herringbone pattern just disappears and the picture is clear.
- Push in the AUTO/AFT Switch to reactivate the automatic fine tuning or leave it released, whichever provides better reception.

**CAUTION:** The UHF Channel Selector cannot be turned directly from 83 to 14 or from 14 to 83. Do not try to force it to do so.

#### To adjust brightness and contrast

Correct brightness and contrast settings are important for good color reproduction. Once the brightness has been set correctly, the contrast can be controlled with the PICTURE Control without altering color reproduction. Perform the following adjustments.

- ♠ Turn the PICTURE Control fully counterclockwise.
- **②** Turn the BRT (brightness) Control from its center detent position and adjust for the desired brightness level.
- Adjust the PICTURE Control from the lowest setting to the desired level according to your preference and room lighting conditions.

The PICTURE Control will adjust the contrast, color intensity and brightness simultaneously in the proper ratio.

#### Earphone jacks

For private listening, insert the earphone plug into the  $[\,\cdot\,]$  receptacle. This disconnects the loudspeaker. The use of the  $[\,\cdot\,]$  receptacle permits the earphone and the loudspeaker to be used simultaneously. TV sound may be recorded by connecting a tape recorder to the  $[\,\cdot\,]$  receptacle with a suitable connecting cord. Adjust the TV volume for a normal listening level.

#### To adjust color and hue manually

Both COLOR and HUE Controls have a limited adjustment range in the AUTO/AFT mode. If you wish to control color reproduction manually, pull the AUTO/AFT Switch so that the switch light goes out, thus disengaging the automatic color mode.

Adjust the COLOR Control for the desired color intensity.



Picture becomes pale.



Picture becomes vivid.





Adjust the HUE Control for the most natural skin tones.



Skin tones become purple.



Skin tones become green.





 COLOR and HUE adjustments have no effect upon black and white programs.

#### To adjust sharpness

Turn the SHARPNESS Control from its center detent position and adjust for the best picture. Turn it downwards for maximum sharpness. Turn the control upwards for a softer picture. If reception conditions cause a snowy picture, more pleasing results will be obtained with a softer picture.

#### Vertical hold control

If the picture rolls vertically, adjust the VERtical Hold Control at the rear.

# CHECKING THE SET BY YOURSELF

Many apparent malfunctions may be caused by slight misadjustments of the regular controls or some other equally simple cause. If any difficulty arises in the operation of your set, first check through

SYMPTON	Λ	CORRECTION
	no picture (screen not lit), no sound	Is the set plugged into a working outlet?
	no picture (screen not lit), but good sound	Turn the PICTURE Control clockwise, or the BRT Control downwards.
	good picture but no sound	Turn the PULL ON/VOL Control clockwise.  Check that the earphone is disconnected from the [·] earphone jack.
Land Constant	no picture, no sound, but snow and noise only	Is the antenna properly connected?     Check the outdoor antenna.

this illustrated list of symptoms and corrections. Should the difficulty persist, unplug the set and contact your Sony dealer.

SYMPTON	Λ	CORRECTION
no	color	<ul> <li>Check that the AUTO/AFT Switch is pushed in.</li> <li>Check that the COLOR Control is not turned fully upwards.</li> <li>Readjust the fine tuning.</li> </ul>
no too her pat	color, picture, indistinct, ringbone itern, ipes, etc.	Readjust the fine tuning.
the same	ted lines or pes	<ul> <li>Often caused by interference from autos, neon signs, hair dry- ers, electric razors, etc. Try ad- justing the antenna for minimum interference.</li> </ul>
A CONTRACTOR OF THE PARTY OF TH	uble images "ghosts"	<ul> <li>Readjust the indoor antenna. Reflections from nearby mountains or buildings often cause this problem. In such cases, a highly directional outdoor antenna may improve the picture.</li> </ul>

#### **SPECIFICATIONS**

Television system American TV standards
Channel coverage VHF channels 2–13

UHF channels 14–83 (70-position detent tuner)

Picture tube Trinitron tube

114-degree deflection

KV-1711D/1712D: 17" picture measured diagonally

KV-1910D: 19" picture measured diagonally VHF telescopic dipole antenna

Antenna VHF telescopic dipole a
UHF loop antenna

300-ohm external antenna terminals for VHF and UHF

75-ohm external antenna terminal for VHF

Speaker KV-1711D/1712D:  $8 \text{ cm} \times 12 \text{ cm} (3\frac{1}{2}\text{"} \times 4\frac{3}{4}\text{"})$ 

KV-1910D:  $10 \text{ cm} \times 15 \text{ cm} (4'' \times 6'')$ 

Power requirements 120 V ac, 60 Hz

Power consumption

KV-1711D/1712D: 145 W (max.) KV-1910D: 155 W (max.)

Dimensions KV-1711D: 556 mm  $\times$  413 mm  $\times$  384 mm (21%"  $\times$  161/4"  $\times$  151/6") (w/h/d)

KV-1712D: 582 mm  $\times$  430 mm  $\times$  384 mm (22%"  $\times$  16%"  $\times$  15%") (w/h/d) KV-1910D: 626 mm  $\times$  462 mm  $\times$  395 mm (24%"  $\times$  18¼"  $\times$  15%") (w/h/d)

Weight KV-1711D: 24.9 kg (55 lb)

KV-1712D: 25.6 kg (56½ lb) KV-1910D: 29.5 kg (65 lb)

Accessories supplied UHF loop antenna

Earphone

Design and specifications are subject to change without notice.

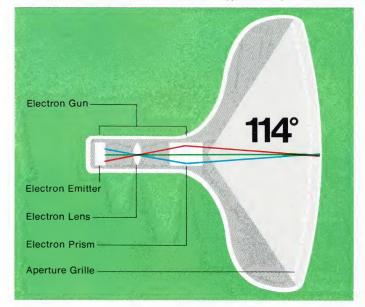
# TRINITRON SYSTEM

Your Sony TRINITRON Color TV has the latest type wide angle 114degree deflection picture tube which provides a bright and clear picture, with high contrast and resolution.

These features are the result of the unique design concepts of the TRINITRON System...the single large electrostatic lens, the vertical phosphor stripe screen, the Aperture Grille, the power-saving nar-

row neck, and the precisely-controlled projection of the three color beams. In addition, the wide-angle tube substantially reduces the cabinet depth.

Your "TRINITRON PLUS" TV represents a technical advance over the now-famous TRINITRON. Openings in the "Aperture Grille" have been widened to allow more electrons to hit the screen. Black carbon stripes have been deposited between the phosphor stripes in areas where light is not emitted. The result is a high-contrast, brighter picture with no increase in energy consumption.



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